# **County of Loudoun**

# **Department of Planning**

# **MEMORANDUM**

**DATE:** March 3, 2010

**TO:** Planning Commission

**FROM**: Judi Birkitt, Project Manager

SUBJECT: ZMAP 2009-0005, SPEX 2009-0009, and CMPT 2009-0001

Green Energy Partners/Stonewall (GEP/S) Hybrid Energy Park

March 3, 2010 Planning Commission Work Session

Since distribution of the staff memo for this item, staff has completed a review of the revised traffic study and found it to be acceptable. Staff has also made minor revisions to the staff recommended transportation conditions.

Additionally, staff has finalized the recommended conditions for the habitat plan (See Attachment 1, Condition 19). There are no outstanding staff issues, and the applicant is in agreement with the Conditions of Approval.

## STAFF RECOMMENDATION

Staff can support the applications. (Refer to the February 26<sup>th</sup> work session memo for Staff's full recommendation.)

## **SUGGESTED MOTIONS**

1.a. I move that the Planning Commission approve CMPT 2009-0001, Green Energy Partners/Stonewall Hybrid Energy Park, based on the attached Findings and forward it to the Board of Supervisors for Ratification.

AND

1.b. I move that the Planning Commission forward ZMAP 2009-0005 and SPEX 2009-0009, Green Energy Partners/Stonewall Hybrid Energy Park, to the Board of Supervisors with a recommendation of approval, subject to the Proffer Statement dated February 25, 2010 and the Conditions of Approval dated March 3, 2010, and based on the attached Findings.

OR,

2.	I move that the Planning Commission forward ZMAP 2009-0005, SPEX 2009-0009, and CMPT 2009-0001, Green Energy Partners/Stonewall Hybrid Energy Park, to a subsequent Work Session for further discussion.
OR,	
3.a. AND	I move that the Planning Commission deny CMPT 2009-0001, Green Energy Partners/Stonewall Hybrid Energy Park.
3.b.	I move that the Planning Commission forward ZMAP 2009-0005 and SPEX 2009-0009, Green Energy Partners/Stonewall Hybrid Energy Park, to the Board of Supervisors with a recommendation of denial based on the following Findings for Denial:

# **ATTACHMENTS**

- 1. Staff Recommended Conditions of Approval (March 3, 2010)
- 2. Findings for Approval (March 3, 2010)
- 3. Office of Transportation Services Third Referral (March 3, 2010)

# ZMAP 2009-0005, SPEX 2009-0009 and CMPT 2009-0001 Green Energy Partners/Stonewall Hybrid Energy Park CONDITIONS OF APPROVAL (SPEX) (March 3, 2010)

(Deletions appear in red strikethrough. Additions appear in blue double underline.)

- Substantial Conformance. The approved Special Exception Use, a utility generating plant and transmission facility, shall be developed in substantial conformance with the Special Exception Plat, consisting of four (4) sheets numbered as 1, 2, 5 and 6 and labeled as "COVER SHEET", "REZONING PLAT/NOTES, TABULATIONS & REQUIREMENTS", "CONCEPT PLAN (ZMAP/SPEX/CMPT PLAT)", and "CONCEPT PLAN OVER EXISTING CONDITIONS", respectively, and dated July 2009, as revised through December 30, 2009, and prepared by William H. Gordon Associates, Inc. (the "SPEX Plat'). Approval of this application for Tax Map #s /60///////38/ (PIN # 193-38-4362), /60////////38A (PIN # 193-49-0539), /61////////12/ (PIN # 193-39-3665), /61////////14/ (PIN # 193-29-6778), and a portion of /60////////39/ (PIN # 194-48-6020) (collectively the "Property") shall not relieve the Applicant or the owners of the Property from the obligation to comply with and conform to any Zoning Ordinance, Codified Ordinance, or applicable requirement. As used in these conditions, "Applicant' includes the owner of the Property subject to this Special Exception approval, its successors, and parties developing, establishing or operating the approved Special Exception Use.
- 2. <u>Period of Validity</u>. This Special Exception approval shall be valid for ten (10) years from the date on which the Special Exception was granted, unless within such ten (10) year period: (1) a building permit is obtained and the erection or alteration of a structure is started and diligently pursued, and (2) an occupancy permit is obtained and a use commenced. Such period of validity may be extended for good cause shown, provided that an application is submitted to the Board of Supervisors a minimum of thirty (30) days before the expiration date in accord with the Revised 1993 Zoning Ordinance Section 6-1313.
- 3. <u>Lot Consolidation</u>. Prior to site plan approval, the Property shall be consolidated into one parcel, with the exception of the private access easement road.
- 4. <u>Property Taxes.</u> The Applicant shall not apply for any exemption from real or personal taxes in association with the Special Exception Use on the Property.
- 5. Noise. Prior to site plan approval, the Applicant shall submit a noise study to the County for approval. The noise study shall analyze the maximum noise potential of the Special Exception Use, including but not limited to, predicted noise during the construction of the special exception use, baseline noise generated by the day-to-day operations of the special exception use, the cumulative noise of the baseline noise and the noise produced once the single-cycle peaker turbines are in operation, and the cumulative noise once emergency back-up generators or equipment are in operation. The noise study shall include recommendations for specific noise attenuation measures and an assessment of whether installation and operation of the proposed noise attenuation measures can achieve noise attenuation that provides compliance with Section 5-1507 of the Revised 1993 Zoning Ordinance.

The Applicant shall conduct noise testing once the Special Exception Use is operational to ensure that noise levels do not exceed the performance standards set forth in Section 5-1507 of the Revised 1993 Zoning Ordinance. Should the testing results at any time determine that noise levels exceed the noise limitations set forth in Section 5-1507, the Applicant shall take immediate action to bring the noise levels into compliance through the use of noise attenuation measures.

- 6. <u>Lighting</u>. All exterior lighting, including security lighting, shall be designed and installed to minimize light trespass and the visibility of lighting from properties offsite of the Property. Exterior light fixtures shall be full cut-off and fully shielded and shall direct light downwards and into the interior of the Property and away from surrounding public roads and properties. Exhaust stacks, storage tanks, cooling towers, turbines, heat recovery steam generators, ("HRSG's"), and similar tall structures shall not have exterior lighting, unless otherwise required by law, ordinance, regulation, or operative safety norms. In addition, the utility generating plant and transmission facility shall be designed to enable exterior lighting for distinct area(s) of the utility generating plant and transmission facility to be switched off when not in use.
- 7. Plume Abatement. Cooling tower plume abatement shall be installed and required to operate during daylight hours when weather conditions exist or at the time the conditions are predicted to occur that would cause a visible plume at a height equal to or greater than 150 feet above the ground elevation of the base of the cooling tower to mitigate the visibility of the cooling tower plume. Additionally, plume abatement shall be required to operate when ambient conditions exist that would cause ground level fog to occur from the cooling tower operation to mitigate the fog conditions.
- 8. <u>Color of Utility Generating Plant and Transmission Facility</u>. Equipment and structures on the Property shall be a light, uniform, neutral color; a color to match the sky; or earth tones, excluding dark gray and black.

#### **ENVIROMENTAL**

- 9. Combined Cycle and Natural Gas Turbine. The production of electrical power shall occur through a combined cycle and single cycle natural gas turbine energy facility that does not involve the use of burning coal or nuclear reaction. Alternative non-fossil fuels, such as biogas and other bio-fuels may be utilized on the Property for the production of electrical power and accessory uses when reliable supplies are available, as approved by the County. The Special Exception Use shall not utilize fuel oil, or diesel fuel in the production of energy.
- 10. <u>Air Quality</u>. The Applicant shall ensure that the emissions levels shall not exceed the Air Emissions (plus 5%) contained in Table 3.1 on page 10 of the report titled "Revised Air Quality Study of Green Energy Partners/Stonewall Solar and Natural Gas-Fired Power Plant at Leesburg, VA", dated November 20, 2009, and prepared by MACTEC Engineering and Consulting, Inc., attached hereto as Exhibit A.
- 11. Water Quality. The Applicant shall design, construct, and install a surface water monitoring station on-site on the Property at point of stormwater discharge with specific monitoring

details as deemed appropriate by the Virginia Department of Environmental Quality ("DEQ") during site plan review. This on-site point discharge water quality monitoring station shall produce monthly data reports measuring Toxicity, Flow rate, pH, Temperature, Dissolved Oxygen, Copper, Iron, Chloride, Water Hardness, Oil, Grease and other Petroleum Hydrocarbons and other elements and compounds at an interval as determined to be appropriate by DEQ requirements to be determined during site plan review. In the event DEQ does not mandate monitoring of Oil, Grease and other Petroleum Hydrocarbons at this singular channelized point of stormwater discharge, these pollutants shall be monitored at the same frequency as what DEQ would require in the permit. In order to maximize the measurement efficiency of this on-site water monitoring station, the Applicant shall, through installation of Low Impact Design ("LID"), microberms, catch basins, and other techniques, ensure that the first inch of stormwater runoff from all impervious areas of the developed site. The paved entrance accessing Sycolin Road and the private access road shall not be subject to this water quality monitoring condition.

- 12. <u>Erosion and Sediment Control and Turbidity Management</u>. In addition to the minimum requirements for erosion and sediment control in Chapter 1220 of the Codified Ordinance and the Virginia Erosion and Sediment Control Handbook, the Applicant shall provide some of the heightened erosion and sediment control measures specified in the Facilities Standards Manual for Reservoir Protection Requirements, namely:
  - a. Super silt fence shall be substituted for silt fence in all perimeter locations;
  - b. The use of stabilization matting shall be expanded to aid in the establishment of vegetation; and
  - c. Development Phasing shall be utilized to avoid extensive areas of disturbance for extended periods of time.

In order to avoid the clearing of additional on-site vegetation for the construction of a stormwater management facility, the Applicant <u>shall request an FSM waiver</u> to be allowed to utilize the existing water body on the Property labeled "SWM Pond" for stormwater management and sediment collection purposes.

The Applicant shall measure levels of turbidity in runoff leaving the project during the construction phase. Outfall discharge measurements sample shall be collected from any storm event that is less than or equal to a two (2) year, twenty-four (24) hour storm that causes a discharge within the first sixty (60) minutes (or as soon thereafter as practical) of when the runoff begins discharging from the facility. This information shall be shared with the County Erosion and Sediment Control Inspector.

Turbidity is measured in nephelometric turbidity units (NTU) or Jackson Turbidity Units (JTU). If discharge turbidity measurements exceed 280 NTU/JTU due to site sediment and erosion control measures the Applicant shall – with consultation with the County Erosion and Sediment Control Inspector – adjust the erosion and sediment control measures to reduce the measurements to a level below 280 NTU/JTU.

13. Zero Discharge. The Special Exception Use shall include a "zero discharge" water treatment system to treat any process water utilized in the operation of the steam generator and

- cooling tower. Process water shall be treated, reused, recycled and not disposed of as surface runoff or into the stormwater management system. Solid wastes resulting from the treatment of the water shall be disposed of offsite in an approved landfill.
- 14. <u>Stormwater Treatment</u>. The Applicant shall (a) incorporate best management practices ("BMP's") for treatment for all stormwater runoff leaving impervious surfaces; (b) design all BMP's to treat the first inch of stormwater runoff from impervious surfaces; and (c) design all BMP's to remove a high percentage of phosphorous, not lower than fifty (50) percent.
- 15. Wetlands. Prior to the commencement of any construction activities in identified wetlands areas, all necessary state and federal wetlands permits must be obtained and copies of these permits shall be submitted to Loudoun County Department of Building and Development.
- 16. <u>Very Steep Slopes</u>. Prior to and during construction, the Applicant shall survey, flag, and install super silt fencing or temporary chain link fencing, in lieu of plastic orange fencing, near the very steep slope areas that are located in proximity to the area to be affected by construction.
- 17. <u>Best Available Control Technology</u>. The Special Exception Use shall utilize Best Available Control Technology ("BACT") in accordance with the most current DEQ permit standards.
- 18. Open Space. For the purpose of these Conditions, open space shall be defined as all areas labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE", "OPEN SPACE AREA", "REPLANTING AREA", "50' YARD", OR "TYPE IV BUFFER YARD", "TREE SAVE AREA #1", and "TREE SAVE AREA #2" (collectively the "Open Space"). A minimum of sixty-five percent (65%) Open Space shall be provided on the Property.
- 19.Habitat Planting and Management Plan. Prior to site plan approval, the Applicant shall coordinate with the County Urban Forester to develop a Habitat Planting and Management Plan for all Open Space on the Property. The Habitat Planting and Management Plan shall include recommendations from the County Urban Forester on the planting and long-term management of all areas subject to the Habitat Planting and Management Plan. Habitat Planting and Management Plan shall include the County Urban Forester's recommendations for indigenous vegetation that provides sustained growth and optimum viability for all Open Space areas, site description, site preparation, specie selection, stocking, establishment method, size, plant material protection and maintenance of all areas subject to such plan. The Habitat Planting Plan shall apply for the duration of the Special Exception Use. For specific areas on the Property, the following shall also apply:
  - a. <u>Solar Array.</u> If the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE" is not used for a solar array, the area shall only be used for Open Space and shall be subject to the open space condition in these Conditions of Approval. If said area is used for a solar array, the area shall be subject to the Open Space and Habitat Management Plan conditions in these Conditions of Approval.

If the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE" is used for a solar array, since establishment of arboreal vegetation areas are not appropriate in the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE", this Habitat Management Plan shall be designed to allow for establishment of a meadowland habitat conducive to flora and fauna indigenous to such a habitat.

- b. <u>Under Powerlines.</u> Within Open Space located underneath the powerlines, where indigenous vegetation has been impaired by herbicide application and where the establishment of arboreal vegetation areas are not appropriate, the Habitat Planting and Management Plan shall be designed to allow for establishment of a meadowland habitat conductive to flora and fauna indigenous to such a habitat.
- c. Replanting Areas. For areas used during construction as staging areas and areas labeled on the SPEX Plat as "REPLANTING AREA", the Habitat Planting and Management Plan shall include recommendations from the County Urban Forester to remedy unstable or compacted soil.
- 19. Natural Resources Management Plan (NRMP). Prior to site plan approval, the Applicant shall coordinate with the County Urban Forester to develop a Natural Resources Management Plan (NRMP) and accompanying planting plan for the entirety of the Open Space on the Property to ensure that all habitats (to generally include forest, meadow, riparian, and wetland) are rehabilitated and managed so that they function as viable habitat. The NRMP shall include recommendations that provide for sustained growth and optimum viability for the entirety of the Open Space, including but not limited to forest, meadow, riparian, and wetland habitats.

The NRMP shall provide for the management of natural resources, including aquatic life, wildlife, and forest, meadow, riparian, and wetland habitats, while allowing for harmony with the Special Exception Use. The Applicant shall actively maintain the Open Space to maximize its habitat value, minimize the impact of the Special Exception Use by the use of trees and vegetation to screen and buffer the adjacent uses, mitigate stormwater run-off, minimize water and air pollution, remove invasive plants, and avoid wildlife conflicts.

The accompanying planting plan shall consist of native species and shall be completed for forest, meadow, riparian, and wetland habitats, to include site description, site preparation, species selection, stocking, establishment method, plant size, plant material protection, plant maintenance, protection against deer, and other management actions. Invasive species shall be removed, whenever practicable. Preferred removal methods shall include mechanical means for woody invasive species, rotational mowing, and the removal of hay, as applicable. If no other method is successful, the application of herbicides may be considered.

All management activities in the NRMP shall consider and be sensitive to the life-cycle of animals, including ground-nesting birds, small mammals, and amphibians. Deer protection shall include eight (8) foot tall fencing at the perimeter of the site or protected areas.

For specific Open Space areas on the Property, the following shall also apply:



- a. Solar Array. If the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE" is not used for a solar array, the area shall only be used as Open Space. If the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE" is used for a solar array, since establishment of arboreal vegetation areas are not appropriate in the area labeled on the SPEX Plat as "SOLAR ARRAY OR OPEN SPACE", the NRMP and accompanying planting plan shall be designed in coordination with the County Urban Forester to allow for establishment of a meadowland habitat conducive to flora and fauna indigenous to such a habitat.
- b. Under Powerlines. Within Open Space located underneath the powerlines, where indigenous vegetation has been impaired by herbicide application and where the establishment of arboreal vegetation areas are not appropriate, the NRMP and planting plan shall be designed in coordination with the County Urban Forester to allow for establishment of a meadowland habitat conductive to flora and fauna indigenous to such a habitat, consistent with existing power line easement requirements.
- c. <u>Construction Staging Areas. The replanting of the construction staging areas shall be in conformance with the Forest Management Plan condition in these Conditions of Approval.</u>
- 20. Forest Management of Construction Staging Areas. Prior to and during construction, the Applicant shall install temporary chain link fencing or another type of steel fencing surrounding construction staging areas to prevent disturbance of adjacent Open Space. The Applicant shall apply surface materials, such as gravel, stone, and natural mulch, to the surface of such areas to minimize impacts to the existing soil structure. Upon completion of the construction phase, the Applicant shall remove from the Property any non-degradable materials, such as gravel or stone that were used during the construction phase. Remaining soil within construction staging areas shall be rehabilitated to its original composition and aerated to a depth of twenty-four (24) inches. The construction staging area labeled on the SPEX Plat as "REPLANTING AREA" shall be rehabilitated as forest habitat with native species, in accordance with the methods specified in the Forest Management Plan and Tree Save Areas condition in these Conditions of Approval.
- 21. <u>Tree Save Areas</u>. Prior to site plan approval, the Applicant shall coordinate with the County Urban Forester to develop a Forest Management Plan and accompanying planting plan for the areas identified on the SPEX Plat as "TREE SAVE AREA #1" and "TREE SAVE AREA #2" (TSA) and an accompanying planting plan for areas identified on the SPEX PLAT as "REPLANTING AREA" (RPARA). This Forest Management Plan shall include recommendations that provide for sustained growth and optimum viability for all TSA's and RAs. The planting plan will include site description, site preparation, specie selection, stocking, establishment method, size, plant material protection and maintenance until establishment has been achieved.

Within the areas identified on the SPEX Plat as TSA's, the Applicant shall preserve healthy trees provided, however, that trees may be removed to the extent necessary for the construction of stormwater management facilities that are required and/or shown on the approved site plan as lying within such TSA's and for the construction of utilities necessary

for development of the Property. A minimum of eighty (80) percent of the canopy within the cumulative TSA's depicted on the Concept Plan will be preserved, exclusive of stands of Virginia Pine over 25 years in age. In the event that the eighty (80) percent canopy threshold cannot be achieved within the designated TSA's, such lost canopy will be recaptured elsewhere onsite in locations to be designated at the discretion of the Applicant in consultation with the County.

- If, during construction on the Property, it is determined by the Applicant's certified arborist and/or the County that any healthy tree located within the boundaries of any of the TSA's as described in this proffer has been damaged during construction and will not survive, then, prior to any subsequent bond release for the Property, the Applicant shall remove each such tree and replace each such tree with two (2)  $2\frac{1}{2}$  3 inch caliper native, non-invasive deciduous trees. The placement of the replacement trees shall be proximate to the area of each such damaged tree so removed, or in another area on the Property as requested by the County.
- 22. Wood Turtle. Prior to beginning work in the area of the wood turtle habitat identified in the Applicant's submitted Endangered and Threatened Species Habitat Evaluation and Rare Plant Species/Community Assessment, prepared by Wetland Studies and Solutions, Inc., and dated November 8, 2004, the Applicant shall perform a search for wood turtles in the area to be affected by construction. The Applicant shall provide educational materials about the wood turtle to contractors working on the Property prior to such contractors beginning work on the Property. The Applicant shall use bridge spans or bottomless culverts to prevent barriers of migration.

#### **TRANSPORTATION**

- 23. Sycolin Road Access. The proposed entrance onto Sycolin Road (Route 643) shall be constructed to VDOT applicable standards including, but not limited to, locating the proposed entrance relative to future median breaks, the provision of turn lanes and the demonstration of adequate sight distance. The Applicant shall coordinate this site entrance with the Office of Transportation Services ("OTS") and VDOT in consideration of any approved and bonded construction plans for the planned future grade-separated interchange on the Dulles Greenway at the westernmost crossing of Sycolin Road, south of the proposed site entrance location.
- 24. Sycolin Road Pottery Site. Prior to site plan approval, the Applicant shall determine if the Sycolin Road Pottery Site (44LD1195) is located upon the Property or would be impacted by construction of the Special Exception Use or the Sycolin Road access. If the Applicant determines that Site 44LD1195 is located on the Property or would be impacted, then, the Applicant shall preserve and protect Sycolin Road Pottery Site (44LD1195) from inadvertent impact and encroachment, regardless of whether this archaeological site is located on the subject property. The Applicant shall delineate the boundaries of the Sycolin Road Pottery Site (44LD1195) on all plans and profiles submitted to the County for review. Prior to the issuance of any grading permit and prior to the commencement of any ground disturbing activities related to the construction of the vehicular entrance proposed on the east side of

Route 643 (Sycolin Road) including any road widening, tree removal, clearing, or other improvements, the Applicant shall install and maintain demountable chain link (long-fence type) fencing to delineate the boundaries of Site 44LD1195. This fence location shall generally correspond to the boundaries of the portion of archaeological site 44LD1195 located on the east side of Route 643 as defined by the Louis Berger Group, Inc. in their report entitled Archaeological Survey of Route 643 (Sycolin Road) and Archaeological Evaluation of Site 44LD1195 (VDOT project: 0643-053-P91, M501) prepared for the Virginia Department of Transportation and dated September, 2006, or may be sited with the more accurate information concerning these boundaries as field verified by a professional archaeologist.

- 25. <u>Traffic Management</u>. Prior to site plan approval, the Applicant shall submit a Traffic Management Plan to the Office of Transportation Services ("OTS") <u>and VDOT</u> for review and approval. Such plan shall address temporary construction entrances and access routes, delivery schedules for wide loads during off-peak times, and measures for minimizing conflicts on access routes to and from the site. <u>Construction traffic access to and from the Property shall be limited to Sycolin Road</u>.
- 26. Cochran Mill Road. Prior to approval of the first site plan for the Special Exception Use, the Applicant shall grant to the County a reservation for future public street dedication of seventy (70) feet of right-of-way to permit future realignment and widening of Cochran Mill Road, together with any necessary temporary construction and drainage easements. Such right-of-way shall be dedicated to the County or VDOT upon request by the County or VDOT and at no cost to the County or VDOT.
- 27. <u>Gant Lane</u>. Prior to approval of the first site plan for the Special Exception Use, the Applicant shall grant to the County a reservation for future public street dedication of fifty (50) feet of right-of-way to permit future widening of Gant Lane, together with any necessary temporary construction and drainage easements. Such right-of-way shall be dedicated to the County or VDOT upon request by the County or VDOT and at no cost to the County or VDOT.
- 28. Emergency Operations Plan. Prior to site plan approval, the Applicant shall contact the Loudoun County Department of Fire, Rescue and Emergency Services to discuss emergency operations plans to include an evacuation plan and access and circulation of emergency personnel and vehicles throughout the Property. The Applicant shall prepare at its own cost an Emergency Operations Plan and shall submit such plan to the Loudoun County Department of Fire, Rescue and Emergency Services for review and approval implementation within one (1) year of initial operation of the Special Exception Use. The Applicant shall be responsible for providing first response to any emergency in relation to the operation of the Special Exception Use, and on-site employees shall be trained as first responders to any such emergency.

In conjunction with the initial submittal of each site plan for the Property, the Applicant shall submit such site plan to the Department of Fire, Rescue and Emergency Services for review

and approval to ensure that the site layout provides emergency vehicles and personnel adequate access and circulation throughout the Property.

#### **UTILITIES**

- 30. <u>Collocation of Effluent and Utility Lines</u>. The Applicant shall minimize land disturbance by coordinating with the Town of Leesburg and Loudoun Water, to the extent permitted by law, to collocate the effluent line with other existing or planned Town of Leesburg and/or Loudoun Water utility lines prior to site plan approval for the Property.
- 31. <u>Utility Lines</u>. The Applicant shall group and bury sewer and water utility lines and facilities to the extent permitted by law allowed by Loudoun Water or the Town of Leesburg policies and regulations.

## **ACCOUNTABILITY**

- 32. <u>Compliance with Special Exception</u>. The Applicant shall provide an annual certification to the Zoning Administrator annually that the Special Exception Use is in compliance with all conditions of this Special Exception.
- 33. Response to Complaints and Inquiries. The Applicant shall respond promptly to any complaints or inquiries to the Board of Supervisors, County Administrator, or Zoning Administrator. In the event the Applicant is notified of any violation of applicable federal, state, or local laws, regulations, or permit conditions, the Applicant shall notify the Zoning Administrator in writing within two (2) business days of receiving such notice and within a reasonable period of time to fully inform the Zoning Administrator of the steps being taken to correct and or remediate the violation.
- 34. <u>Contact Information</u>. Once the Special Exception Use is fully operational, the Applicant shall prepare and provide to the Zoning Administrator a report showing operational factors associated with the Special Exception Use. Such report shall include the name(s) and contact information for on-site supervisors, and verification of current valid state and federal licenses and permits. The Applicant shall promptly notify the Zoning Administrator of any changes, normally within five (5) business days.
- 35. Federal, State, and Local Approvals. The Special Exception Use shall not commence normal operation until all necessary approvals from applicable regulatory bodies of the state, federal, and local government have been obtained. The Applicant shall operate the Special Exception Use in conformance with all permits, laws, rules and regulations of federal, state and local laws. The Applicant shall maintain periodic reports and copies of such approvals and permits on site, and upon request shall provide copies of these reports and permits to the Zoning Administrator.
- 36. Federal and State Permits. If violations of any state or federal permits are reported to Loudoun County by the applicable regulatory agency, the Board of Supervisors, and/or the County Administrator, may request the Applicant to provide, at the Applicant's sole expense,

the services of an appropriate firm to review the nature of the violation, if any, and the remedy, if any. This firm shall be jointly selected by the Applicant and Loudoun County and will report solely to Loudoun County.

- 37. <u>Inspections</u>. The County reserves the right to inspect the site at any reasonable time during normal hours of operation without prior notice to insure that the operation of the Special Exception Use meets the requirements of the <u>Revised 1993 Zoning Ordinance</u>, these conditions, the codified ordinance or other regulatory requirement.
- 38. <u>Discontinuance of Use</u>. At such time as the Property shall not be used for power production and transmission, the Applicant shall restore the site substantially to its prior condition, or such other condition as may be approved by the Board of Supervisors.

Exhibit A. Air Quality

Pollutant/Unit	One Combined Cycle (CC) Unit	One Simple Cycle (SC) Unit	Four Units (2 CC + 2 SC)	Cooling Tower	Support Units	Annual Total
CO						
Lbs/hour	11.0	34.6	91.2		27.5	
Tons/year	45.1	33.0	156.2		32.4	198.0
PM/PM-10						3
Lbs/hour	14.4	10.0	48.8	1.7	0.7	
Tons/year	63.1	10.0	146.1	7.4	2.5	163.8
NOx		Ĭ				
Lbs/hour	18.0	72.2	180.4		14.3	
Tons/year	74.5	68.5	285.9		18.8	319.9
SO <sub>2</sub>						
Lbs/hour	1.5	1.4	5.8		0.1	
Tons/year	5.4	1.1	13.0		0.2	13.8
VOC						2
Lbs/hour	6.2	3.3	19.0		5.7	
Tons/year	25.4	3.2	57.2		3.1	63.3
Ammonia						
Lbs/hour	14.8		29.6			
Tons/year	64.7	10	129.5			136.0

## **CONDITIONS OF APPROVAL (ZMOD) March 3, 2010**

1. The height modification of Section 4-606 of the Revised 1993 Zoning Ordinance increasing the maximum building height to 120 feet without providing additional setbacks shall only apply to the steam turbine enclosure. All other structures that are not exempt under Section 1-103(D)(2) shall comply with the building height requirements of Section 4-606 of the Revised 1993 Zoning Ordinance.

### FINDINGS FOR APPROVAL

(Deletions appear in red strikethrough. Additions appear in blue double underline.)

# **Commission Permit**

- 1. The proposed utility generating and transmission facility is reasonable on this particular site due to the site's unique conditions. Two existing underground natural gas lines (Columbia and Dominion) and two existing overhead high-voltage electrical transmission towers with three separate transmission lines (one 500kV and two 230kV) cross the property in a north-south direction. The subject property is located within the AI (Airport Impact) Overlay District, outside of but within one (1) mile of the Ldn 60 aircraft noise contour, and within the QN (Quarry Notification) Overlay District.
- 2. The proposed utility generating and transmission facility is reasonable on this particular site due to the industrial nature of the surrounding uses. The use is compatible with the intensive surrounding uses to the northwest, east, and southeast, specifically the Leesburg Executive Airport, Luck Stone quarries, and the Fairfax Water Plant.
- 3. The proposed utility generating and transmission facility will protect Luck Stone Quarry from encroaching residential development, consistent with the Transition Policy Area policies of the <u>Revised General Plan</u>.
- 4. Phillip Bolen Memorial Park and Sycolin Creek will provide a visual and spatial transition between the proposed utility generating and transmission facility and uses to the north, as called for in the Transition Policy Area policies of the <u>Revised General Plan</u>.
- 5. The Luck Stone quarries will provide a visual and spatial transition between the proposed utility generating and transmission facility and the suburban uses in Eastern Loudoun, as called for in the Transition Policy Area policies of the Revised General Plan.
- 6. The more intense uses will be clustered on the eastern portion of the site, closer to the Suburban Policy Area, while the western portion of the site closest to the Rural Policy Area will ultimately contain a vegetative buffer of between 550 and 900 feet deep.
- 7. The site's terrain will help shield views of the power plant from Sycolin Road and the Dulles Greenway.
- 8. The proposed utility generating and transmission facility will use clean burning and environmentally sound and proven fuel sources, consistent with the <u>Revised General Plan</u> Energy Policies.
- 9. The proposed utility generating and transmission facility is consistent with the <u>Revised General Plan</u> Energy Policies, which support the timely delivery of electrical service to businesses and households.
  - 10. With the condition for a habitat management plan, the site's natural and passive

open spaces improves the site's ecological and recreational functions, as anticipated in the General Plan.

- 10. As a secured facility, the proposed natural open space (land left mostly in an undeveloped state to include forests, meadows, hedgerows, and wetlands) is most appropriate for the site. The proposed passive recreation open space is the most appropriate type of open space, as defined in the Revised General Plan, to be located along Sycolin Creek.
- 11. As conditioned, the natural resources management plan will ensure that the site's natural and passive open spaces fulfill ecological and recreational functions while helping to meet the open space levels anticipated by the Revised General Plan for the Lower Sycolin Transition Policy Area subarea.
- 12. The ability of the solar array area to meet the open space policies is dependent on the area functioning as viable habitat. The natural resources management plan to be completed for the entirety of the designated open space will ensure that all habitats (to generally include forest, meadow, riparian, and wetland) are rehabilitated and managed so that they function as viable habitat.
- 13. Counting the solar array area as open space is reasonable on this particular site, given the environmental and educational benefits of solar power, together with the condition to plant and maintain indigenous plantings within the solar array area and throughout the entire site's open space areas.

## **Zoning Map Amendment and Special Exception**

- 1. As conditioned and proffered, the respective applications adequately address environmental impacts.
- 2. As conditioned and proffered, the respective applications adequately mitigate local road impacts during the construction phase and once operational.
- 3. The application adequately mitigates noise and lighting impacts, as well as visual impacts associated with the vapor plume.
- 4. The use would have a positive economic impact upon the County during construction and once operational.
- 5. As conditioned and proffered, the respective applications adequately address emergency services.